

145919

Friday, May 06, 2016 10:43:09 AM

N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 4/21/2016 **Start Qty:** 4.00 ***4***

Cust Item ID:

Required Date: 5/5/2016 **Req'd Qty:** 4.00 *** 1 ***

Customer:

Reference:

Approvals: **Process Plan:** **Date:** **Tooling:** **Date:**

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D2435	Rev E1

0.00

120

FLOW WATER JET

Waterjet

Memo

0.64

FLOW CNC Waterjet

CUT BLANK AS PER FILE D2435

130

0.32

130

HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

2.08

HAAS CNC vertical machine #1

1-Inspect material for defects or damage prior to machining
2-Machine as per Folio FA789 and Dwg D2435 Identify as D2435
3-Deburr

140

0.00

140

QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.04

Quality Control

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause				FAULT CATEGORY					
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐				Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐					
				OTHER :					

Friday, May 06, 2016 10:43:09 AM

Page 2

DAS
21
9-09

AMS 04 2016

2m 16/07/29

DQA: _____ Date: _____



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				OTHER : ☐							

Picklist Print

Friday, May 06, 2016 10:43:07 AM

Page 1

Work Order ID: 145919

145919

Parent Item: D2435

D2435

Parent Item Name: Bearpaw

Start Date: 4/21/2016

Required Date: 5/5/2016

Start Qty: 4.00

Required Qty: 4.00

Comments:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MUHMWB10		Purchased	No			120	sf	60.2330	3.2	12.8			

MUHMWB10

UHMW 1" Black - 48"x120" Tivar Mfg.#52480104

**

05/16/07/13

Location

Loc Qty

Loc Code

MAT

29.9

m134171

29.9

MAT018

30.333

m131661

1.473

m134372

28.86

i35013

i3

DQA: _____ Date: _____



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Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :							
Misidentified	☐	Past Due	☐								

DART AEROSPACE LTD		Work Order: 145919
Description: Bearpaw		Part Number: D2435
Inspection Dwg: D2435	Rev: E1	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article
 ☐ Prototype

Inspection Sheet Drawing Dimension		Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
A	0.063 x 45°	+0.030/-0.010	0.063 x 45°	✓		MJP-04	VARN
B	5.500	+/-0.030	5.500	✓			
C	0.200	+/-0.030	0.205	✓			
D	R0.250	+/-0.030	0.250	✓			
E	0.250	+/-0.010	0.253	✓			
F	0.625	+/-0.030	0.633	✓			
G	0.25 x 45°	+/-0.030	0.250 x 45°	✓			
H	0.375	+/-0.010	0.380	✓			
I	19.000	+/-0.030	19.000	✓			
J	0.950	+0.030/-0.010	0.960	✓			
K	Ø0.260	+0.005/-0.000	0.260	✓			
L	Ø0.930	+/-0.030	0.930	✓			
M	0.30	+0.030/-0.000	0.320	✓			
N	0.375	+/-0.030	0.375	✓			
O	7.375	+/-0.030	7.375	✓			
P	4.250	+/-0.010	4.250	✓			
Q	2.000	+/-0.030	2.000	✓			
R	9.000	+/-0.010	9.000	✓			
S	15.750	+/-0.030	15.750	✓		↓	↓

Measured by: DAS 33 9.89	Audited by: DAS 45	Prototype Approval: N/A
Date: 14/07/20	Date: 2016-7-28	Date:

Rev	Date	Change	Revised by	Approved
A	03.09.22	New Issue P/O K10007	KJ/RF	#

DQA: _____ Date: _____



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RELEASED
98.06.17 KE

DESIGN	DRAWN BY	DART AEROSPACE LTD HAMKESBURY, ONTARIO, CANADA	
KE	KE		REV. E
CHECKED WB	APPROVED DS	DRAWING NO. D2435	SHEET 1 OF 2
DATE 98.05.19		TITLE BEARPAW	SCALE 1:5

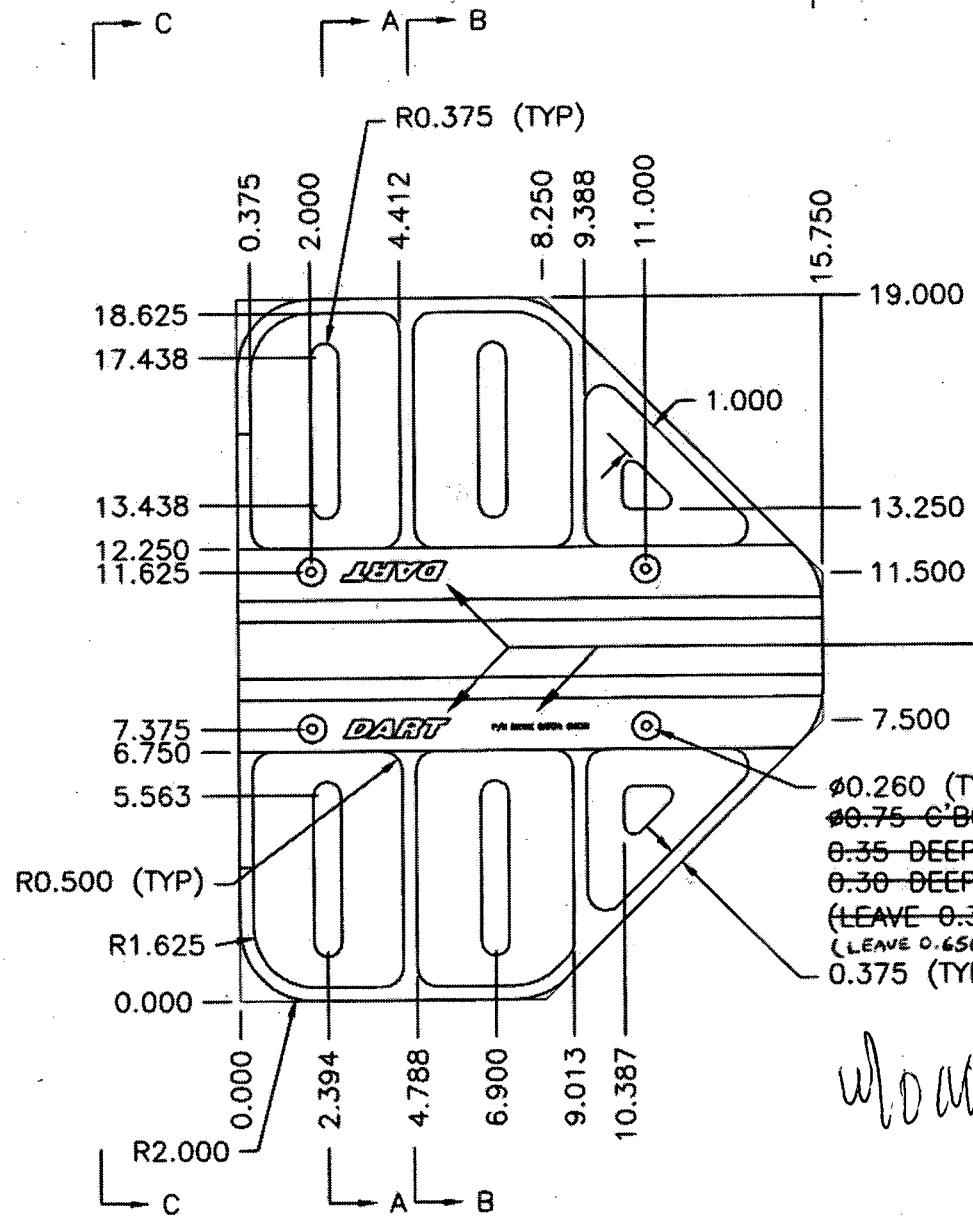
A	96.01.24	NEW ISSUE
B	96.03.26	CHANGE BORE AND C'BORE DEPTH
C	97.05.07	CHANNEL & C'BORE DEPTH CHANGED
D	97.10.17	R1.5 BORE WAS R2.637 (TSR A469)
E	98.05.19	CHANGE C'BORE, R1.58 WAS R1.50

EFFECTIVE DEOS

9143

ENGRAVE LOGO TO MAX DEPTH OF 0.012. ENGRAVE PART AND BATCH NUMBERS TO MAX DEPTH OF 0.010. (TYPICAL LOCATION AS ILLUSTRATED)

E1 02.12.17 $\phi 0.93$ WAS $\phi 0.75$ REA



MATERIAL: UHMW BLACK PER SPEC CONTROL DRAWING D2689
1.00 THICK (MACHINE TO 0.950)

WLOWS919

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

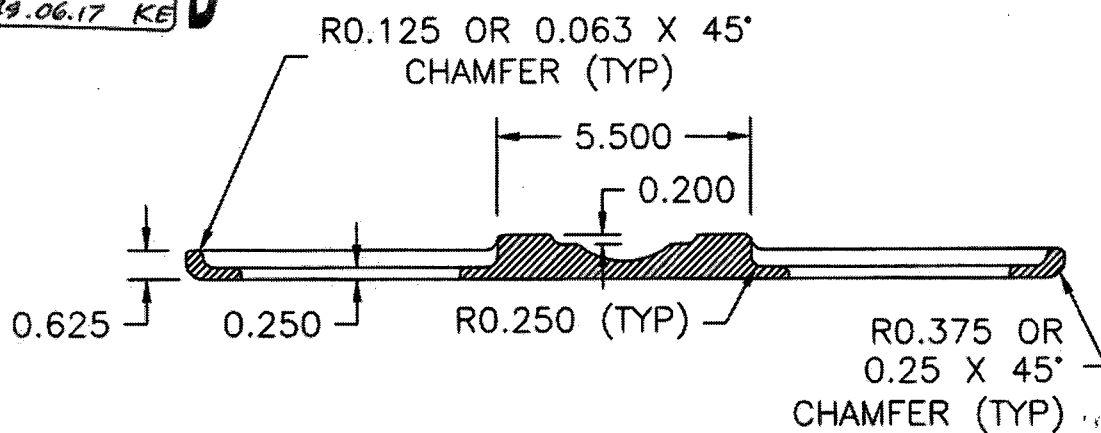
Work Order update only ☐

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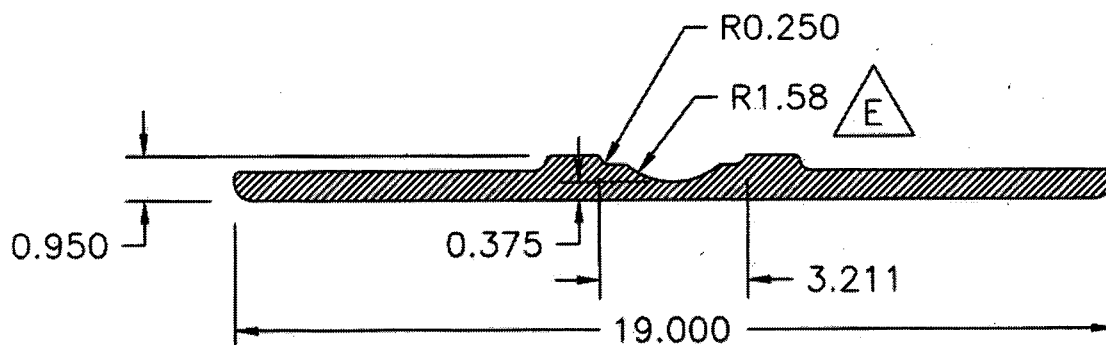


DESIGN <i>KE</i>	DRAWN BY <i>KE</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>DR</i>	APPROVED <i>KS</i>	DRAWING NO. D2435	REV. E SHEET 2 OF 2
DATE 98.05.19		TITLE BEARPAW	SCALE 1:4

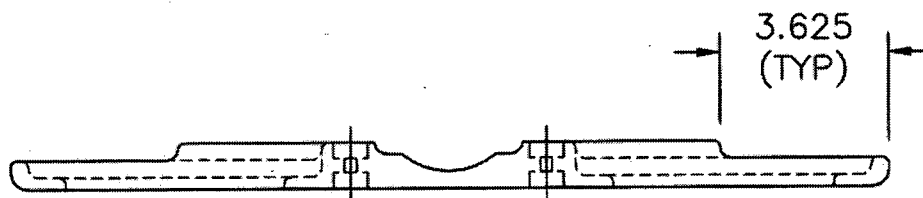
RELEASED
98.06.17 KE



SECTION A-A



SECTION B-B



SECTION C-C

DQA: _____ Date: _____



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